

REMARKS

Applicants thank the Office for withdrawing the rejection of the claims set forth in the November 4, 2009 Office Action. The Office now newly rejects the claims over the Glenn patent (U.S. 6,235,683) alone.

The Office previously acknowledged that Glenn does not disclose a surfactant-free aqueous suspension that includes hydrophobic nanostructured particles of a metal and/or a polymer (see lines 1-2 of page 5 of the March 22, 2010 Office Action). The Office again concedes this point in the last two lines on page 4 of the present Office Action.

The Office takes the position that the present claims are nonetheless obvious over the Glenn disclosure even though Glenn does not disclose all of the features of the presently-claimed invention. In particular, the Office asserts that it would be obvious to use PTFE particles in the Glenn compositions to arrive at the presently-claimed invention.

Applicants traverse the rejection for the reason, *inter alia*, that the rejection lacks any evidentiary basis. As explained by Applicants in previous responses, the compositions of Glenn include the particles of an inorganic particulate material that may optionally be hydrophobicized. Glenn does not, however, disclose or suggest that an organic particle, a polymer particle or a metal particle may be used in place of the inorganic particulate material.

There is no evidence of record that one of skill in the art would believe that PTFE particles could be used as a substitute for the particulate material in the Glenn compositions. Glenn even teaches away from such a substitution. The compositions of Glenn are applied to plant surfaces such as fruit trees. At column 9, lines 7-13, Glenn discloses that the particulate materials should not be considered harmful to the ultimate consumer (e.g., a person consuming treated fruit). Applicants submit that consumers would find it extremely objectionable to find out that fresh “natural” foods such as fruit were coated in Teflon (PTFE).

Further, the Office asserts that PTFE's known water-repellant properties would make it obvious to substitute Teflon particles for the Glenn particulate materials. This reasoning, on its own, is a legally insufficient basis from which to conclude that it would be obvious to use PTFE particles in the Glenn compositions. Many materials known to have water-repellant properties would be unacceptable in the Glenn compositions. For example, crude oil and derivatives thereof such as diesel fuel are water repellent. Spraying a particulate dispersion of crude oil and/or diesel fuel onto a plant would, however, result in death of the plant or produce food that is unsuitable for human or animal consumption. Thus, water repellency is an insufficient basis from which to assert it would be obvious to substitute a PTFE particle for the particulate material of Glenn.

Further still, there is no evidence of record that evaporation a water dispersion of PTFE particles will result in a surface having sufficiently continuous hydrophobic properties such that the effects of the Glenn compositions can be realized. For example, if the evaporation of water dispersions of PTFE form agglomerates or islands of collected PTFE particles, any film formed on the surface of a plant would be discontinuous and may not protect the plant from the effects of supercooling.

Applicants thus submit that the Office's basis for rejecting the claims as obvious over Glenn is not supportable.

The Office further admits that Glenn does not disclose a second feature of the present claims; namely, a requirement that the particles are present in an amount of 0.01-1% by weight (see the last two lines on page 4 of the present Office Action). To cure this deficiency, the Office asserts that it would be obvious to adjust the concentration of the particulate materials in the Glenn composition to an amount within the range recited in the present claims. As support for this contention, the Office cites to column 6, lines 20-29 of the Glenn disclosure.

Applicants point out that the cited disclosure does not describe changing the relative amount of particulate material present in the Glenn compositions but instead discloses that the amount of particulate materials applied to a plant may be adjusted to enhance supercooling characteristics. Adjusting the amount of the particulate material applied to the surface of a plant is different from adjusting the amount of the particulate material in the composition. The amount of material applied to a plant can be adjusted by, for example, multiple applications of the Glenn composition (see column 6, lines 50-51). In fact, the total amount of the composition and/or particulate material applied to the plant can be adjusted without making any changes to the amount of particulate materials present in the composition. Likewise, the particular placement of the composition on the plant, e.g., only on portions of the upper-exposed leaf surfaces, can be selected for coverage.

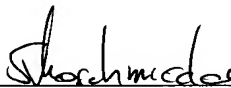
In summary, the Office failed to prove that one of skill in the art would be motivated to adjust the particulate material concentration in the Glenn composition as a way to adjust the amount of particulate material applied to plant surfaces.

The rejection of the claims is thus further not supportable.

For the reasons discussed above in detail, Applicants request withdrawal of the rejection and the allowance of all now-pending claims.

Respectfully submitted,

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